Bruhat Bangalore Mahanagara Palike
Excecutive Engineer, Project Division,Yelahanka

Name of Work: Providing new borewells and CC Roads, drains development in Nagawara, Mestripalya and other adjacent Layouts

Est Cost: 120.00 Lakhs

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
1	Geophysical investigation of site for sinking Borewell for supplying drinking water to the habitation either through the Hand pump, MWS of P.W.S.S by vertical electrical sounding by adopting Venner or Schlumberger's method, including reconnaissance survey of geological formation, Gerophysical investigation of existing Ground Wate in the vicinity, its qualityf 1.0 meter in consolidated formation for proper seating of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation of instrument and accessories to work site., engaging technical personal and labour required etc., as per Specification and direction **(P.47, L 9.4) PRED.SR 2019-20**								
	Basic Rate	3768.00							
		1				1.00	Each	3768.00	3768.00
2	Sinking borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above CFM & above in all strats including over burden upto 20 mts fixing of casing pipes, collars and cap with necessary cutting, throading and welding including transportation of rig and supporing vehicles, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (excluding coat of casing pipes, collars, cap etc.,) **Sl no. 13.01 PRED SR 2019-20**								
	Basic Rate	347							
	0 to 50 m	1	50.00			50.00	m	347.00	17350.00
	Basic Rate	442							
	50 to 100 m	1	50.00			50.00	m	442.00	22100.00
	Basic Rate	456							
	100 to 150 m	1	50.00			50.00	m	456.00	22800.00
	Basic Rate	536							
	150 to 200 m	1	50.00			50.00	m	536.00	26800.00
	Basic Rate	634							
	200 to 250 m	1	50.00			50.00	m	634.00	31700.00
	Basic Rate	700							
	250 to 300 m	1	50.00			50.00	m	700.00	35000.00
	Basic Rate	825							
	300 to 350 m	1	50.00			50.00	m	825.00	41250.00
3	Supply of ISI mark 175 mm nominal bore medium black ERW casing pipe of 5 mm thick black electric resistance continuous welded mild steel tube material confirming to IS 1387 / 1993 & manufactured from hot rolled steel skelp / stripes in random length of 4 to 7 mts both ends threaded confirming to IS 554 / 1985, one end fixed with a socket and the other and with a plastic protection end (including of all taxes) **SE PRED III NO 84**								
		1	54.00			54.00	Rmtr	1325.00	71550.00
4	Providing and fixing to wall, ceiling and floor unplasticised PVC 6.00 kgs/sqcm working pressure with pipe fittings, wall clips etc., and making good the wall, ceiling and floor for sanitary pipelines including cost of all materials, labour charges, HOM of acquirements and testing complete as per specifications. - 250mm dias. (Page No. 88 Item No. 12.116.5) PWD SR 2018-19								
	Basic Rate	2075							
	Area Weightage 6%	124.5							

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	Total	2199.5							
		1	12.00			12.00	Rmtr	2199.50	26394.00
5	Supply and delivery at site brand New Atalanta,Suguna,CRI KIRLOSKER AND other equipment pumps 15.00 HP/11KW(30 Stage)P. No. XLII I No.43) (K.P.W.D SR 2018-19)								
	15 HP 30 Stage	1				1.00			
						1.00	Unit	63498.00	63498.00
6	KSRB13-3.1: Providing and fixing to wall celling and floor glavanised/ mild steel tubes (medium grade 1.27 kg /mt) B class **50 mm dia** nominal bore with all fittings (earth work in trenches to be measured and paid for separately) Including cost of all materials, labour charges, HOM of equipments and testing complete as per specifications. **(Page 92 ITEM NO 13.6)**								
	Basic rate	512.00							
	6% AW	30.72							
	Sub Total	542.72							
		1	280.00			280.00	Mtr	542.72	151961.60
7	Supplying and drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper with low resistance conductor confirming to IS:8130-1984 and virgin grade PVC insulation and powder coating extruded PVC sheathed suitable for working voltage upto 1100Volts as per IS-694:1990. **P. No. 7/ I No. (2.6.4) 3cx 6.0 Sqm KPWD Electrical SR 2019-20**								
		1	580.00			580.00	Mtr	205.00	118900.00
8	Supplying and Fixing 20"x20"x2.5"polished wood board made up not less than 15mm thick plank with front plank one end providing for olding at other end fixing the same to the valve using tapered bolts and nuts, (P No. 24 No.5.6.6 KPWD Electrical SR 2019-20)								
	20x20x2.5	1				1	Each	292.00	292.00
9	Supplying of 1.1 KV LT UG cable having aluminium condutor PVC insulated shethed, EXTREDED INNER SHEATHRD galvnised steel,stirp (2CX 10Sqm.mm wire armoured) confirming IS 3975;1990(no.of strip indicated I GTP) AND extruded PVC outer sheathing armoured cable IS 1554 part 1;1998 and confirming to GTP of group.A.4 Core 16Sqmm.P No.40/ I No.6.4.4 (4 core 16 Sqmm) KPWD Electrical SR 2019-20								
		1	24.00			24.00	Mtr	150.00	3600.00
10	Labour charges for laying of 1.1 K.V class UG cable, in existing trench GI Pipe / stoneware pipe /on wall/on poles as required In existing trencg/duct 6 Sqmm to 16 Sqmm)P No. 41 / I No. 6.5.1 KPWD								
		1	24.00			24.00	Mtr	10.80	259.20
11	Supplying and fixing of procelin fuse channel with e on existing wooden / panel using necessary nuts, bolts and washers , 63 Amps **(P No. 44 / I No. 5.7.3 KPWD Electrical SR 2019-20)**								
		1				1.00	Each	227.00	227.00
12	Supplying and fixing maniature circuit breakers on existing MCB Distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, Energy cross -3 with short circuit breaking capacity of 10K And Completed wiring confirming to IEC 60898 50-63 Amps TPN **(P. No. 27 I No.5.17.9) KPWD Electrical SR 2019-20**								
		1				1	NO	2397.00	2397.00
13	KSRB 13-7.1-4: Providing and fixing in position 65mm nominal bore gun metal non-return valve horizontal type of approved make including cost of all materials, labour and HOM of equipments with all leads complete as per specifications NO KBS 13.2.16 / 13.13 **Page No.90 Item No. 13.56 / PWD SR 2018-19**								
	Basic rate	1728.00							
	6% AW	103.68							
	Sub Total	1831.68							
		1				1	NOS	1831.68	1831.68

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14	Providing NP/CP waste unions conforming to ISI specifications and fixing them in position as per directions including cost of materials, fixtures and conveyance to work spot etc., complete. **P. No.92/ I. No. 13.81.3 PWD SR 2018-19**								
	Basic rate	210.00							
	6% AW	12.60							
	Sub Total	222.60							
	50mm dia	1	1.00			1	NOS	222.60	222.60
15	Gate value 65mm nominal bore gun metal **P. No.XXVI sl No. 662 PWD SR**								
	65mm dia	1	1.00			1	NOS	1694.92	1694.92
16	Supplying fully automatic **star-delta starter** unit push button type with suitable wires, 3 contactors, one adjustable thermal timer mounted on a common base plate held in steel enclosure for use on 400/440 volts 3 phase and wired after fixing to the existing wooden board for motor.Above 12.5 HP upto 25 HP (P No. 24 / I No.5.2.2 KPWD Electrical SR 2019-20)								
		1				1	NO	8000.00	8000.00
17	Earth work excavation By Manuall Means for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches, 1.5m and above in width, in Soft rock/ ordinary rock not exceeding 1.5m in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with all lead upto 50m after breaking of clods complete as per specifications. (P.No.6, I.No.2.3) PWD SR 2018-19								
	Basic rate	299.00							
	6% AW	17.94							
	Sub Total	316.94							
		1	305.00	0.60	0.70	128.10			
						128.10	cum	316.94	40600.00
18	KSRB 2.6 : Providing and filling sand in foundation to required depth for sub soil treatment including watering ramming with all lead and lift complete as per specifications.(P.No.7, I.No.2.13) PWD SR 2018-19								
	Basic rate	2060.00							
	6% AW	123.60							
	Sub Total	2183.60							
		1	305.00	0.60	0.25	45.75			
						45.75	cum	2183.60	99900.00
19	KSRB13-9.3 : Providing and fixing to wall, ceiling and floor high density polyethylene pipes 6.00 kgf/sq.cm working pressure 63mm outside diameter with special flange, compression type fittings, wall clips, making good the wall, ceiling and floor, including cost of all materials, labour charges, HOM of equipments and testing complete as per specifications. Specification No.KBS 13.2.15.2 / 13.9 (Page no.94, Item No.13.73.2) PWD SR 2018-19								
		1	305.00			305.00			
	Basic rate	372.00							
	6% AW	22.32				305.00	Rmtr	394.32	120268.00
	Sub Total	394.32							
20	KSRB 2-4 : Refilling available earth around pipe lines, cables in layers not exceeding 20cms in depth, compacting each deposited layer by ramming after watering with lead upto 50m. and lift upto 1.5 m. including cost of all labour complete as per specifications. (Page No.7, Item No. 2.11) PWD SR 2018-19								
	Basic rate	121.00							

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	6% AW	7.26							
	Sub Total	128.26							
	From Pipe line excavation					128.10			
	Deduct from item no. 30					-45.75			
						82.35	cum	128.26	**10562.00**
21	BESCOM Deposit	L/S	1			1	Ls	**13000.00**	**13000.00**
22	KSRRB 300 - Excavation for road, drains and similar works KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 (P.No-143, I.No-19.1)								
	Basic rate	130.00							
	6% AW	7.80							
	Sub Total	137.80							
	8Km lead & Lift= 57+(2*1.28*8)	77.48							
	Total	**215.28**							
	For RCC Drain	2	105.00	1.00	1.00	210.00			
		2	188.00	1.10	1.00	413.60			
		1	50.00	1.10	1.00	55.00			
	For RCC Culvert	1	6.00	1.50	1.10	9.90			
						688.50	cum	215.28	**148220.00**
23	KSRRB M2100-10. Providing and laying Plain cement concrete of mix 1:3:6 with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. (P.No-222,I No-27.18)								
	Basic rate	5115.00							
	6% AW	306.90							
	Sub Total	5421.90							
	For RCC Drain	2	105.00	1.00	0.15	31.50			
		2	188.00	1.10	0.15	62.04			
		1	50.00	1.10	0.15	8.25			
	For RCC Culvert	1	6.00	1.50	0.15	1.35			
	For Kerb Stone	2	188.00	0.20	0.10	7.52			
	For Roads	1	105.00	4.50	0.15	70.88			
		1	24.00	6.20	0.15	22.32			
		1	28.00	5.50	0.15	23.10			
		1	80.00	5.30	0.15	63.60			
		1	67.00	5.20	0.15	52.26			
		1	206.00	6.00	0.15	185.40			
						528.22	cum	5421.90	**2863929.00**
24	Providing and laying plain/reinforced cement concrete for side drains using M20 nominal mix concrete with OPC at 300 kgs. With 20mm and sown size granite metal course aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compcted for walls and bottom including centring shuttering cost of material HOM of machinary curing etc., complete execluding cost of steel as per MORTH specification no. 1500, 1700, 2200 including cost of material labour HOM complete as per specification. (P.No.271, I.No.37.59.2)								
	Basic rate	6670.00							
	6% AW	400.20							
	Sub Total	7070.20							
	For RCC Drain Bottom	2	105.00	0.75	0.15	23.63			
		2	188.00	0.90	0.15	50.76			

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		1	50.00	0.90	0.15	6.75			
	For RCC Culvert	1	6.00	1.30	0.23	1.79			
	For RCC Drain Side wall	4	105.0	0.15	0.60	37.80			
		4	188.00	0.15	0.60	67.68			
		2	50.00	0.15	0.60	9.00			
	Culvert Wall	2	6.00	0.23	0.60	1.66			
						199.07	cum	7070.20	**1407429.00**
25	KSRRB - M2300-14: Providing TMT steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining memebrs wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications.MORTH Specifiction No. 1600 & 2200 for TMT bars Fe 500. (P.No.239, I.No.29.29.2)								
	Basic rate	69804.00							
	6% AW	4188.24							
	Sub Total	73992.24							
	Considering steel For Drain @ 60 kg / cum		195.62	0.06	-	11.74			
	Considering steel For Culvert & Slab @ 100 kg / cum		3.45	0.09	-	0.31			
						12.05	Tonne	73992.24	**891414.00**
26	Providing and fixing RCC precast cover slab of 100mm thick for drain in cement concrete 1:1.5:3 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)								
	Data rate	2337.00							
	For RCC Drain	2	105.00	0.75	-	157.50			
		2	188.00	0.90	-	338.40			
		1	50.00	0.90	-	45.00			
						540.90	Sqm	2337.00	**1264083.00**
27	Providing and fixing RCC precast cover slab of 250mm thick made out of CC 1:2:4 and jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-								
	Data rate	5418.00							
	For Culvert Slab	1	6.00	1.20	-	7.20			
						7.20	Sqm	5418.00	**39010.00**
28	KSRRB M300-14. **Excavation for roadwork in all types of soil** by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 10km lead (I No-19.14,P No-143)								
	Basic rate	41.00							
	6% AW	2.46							
	Sub Total	43.46							
	10Km lead= (2*1.28*10)	25.60							
	Total	**69.06**							
	For Roads	1	105.00	4.50	0.30	141.75			
		1	24.00	6.20	0.30	44.64			
		1	28.00	5.50	0.30	46.20			
		1	80.00	5.30	0.25	106.00			
		1	67.00	5.20	0.30	104.52			
		1	206.00	6.00	0.30	370.80			
						813.91	**Cum**	**69.06**	**56,208.62**

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29	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriagecting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications Clause 401 of MORTH V Revision.(I No-20.5,P No-153)								
	Basic rate	1882.00							
	6% AW	112.92							
	Sub Total	1994.92							
	For Roads Cut portion	1	105.00	1.00	0.15	15.75			
		1	24.00	1.00	0.15	3.60			
		1	28.00	1.00	0.15	4.20			
		1	80.00	1.00	0.15	12.00			
		1	67.00	1.00	0.15	10.05			
						45.60	cum	1994.92	**90968.00**
30	Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 with OPC at 360 kg/cum and coarse aggregate 0.69cum, fine aggregate 0.46cum. over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 1shed with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints,including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades, textured with texturing machine, and curing including cost of all materials, labour,hire charges of machineries,all lead & lift charges etc., complete as per specifications. (P.No-176,I No-22.6.1)								
	Basic rate	4916.00							
	6% AW	294.96							
	Sub Total	5210.96							
	For Roads	1	105.00	4.50	0.15	70.88			
		1	24.00	6.20	0.15	22.32			
		1	28.00	5.50	0.15	23.10			
		1	80.00	5.30	0.15	63.60			
		1	67.00	5.20	0.15	52.26			
		1	206.00	6.00	0.15	185.40			
						417.56	cum	5210.96	**2175862.00**
31	Providing and fixing pre cast solid cement concrete kerb stones made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete. As per the direction of Engineer incharge. (P.No.27, I.No.5.30)								
	Basic rate	408.00							
	6% AW	24.48							
	Sub Total	432.48							
		2	188.00			376.00			
						376.00			
						836.00	Nos	432.48	**361553.00**
32	Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 Specification No. KSRRB M800-6. (P.No.180, I.No.24.1)								
	Basic rate	80.00							
	6% AW	4.80							
	Sub Total	84.80							
		2	188.00		0.35	131.60			
						131.60	Sqm	84.80	**11160.00**

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	Total Construction Cost	~~10414842.58~~ 10457762.62
	Towards KRIDL Charges @ 3+1%	~~416593.70~~ 418310.50
	~~Sub Total~~	~~10831436.28~~
	Towards GST@ 12%	~~1046983.53~~ 1229931.51
	Total	~~11878419.82~~ 11993564.64
	For 1% DPR Charges	~~120000.00~~ 116500.00
	Utility Shifting,Miscellaneous and Rounding off	~~1,580.18~~ 4935.36
	GRAND TOTAL	12000000.00
	(In words : One Crore Twenty Lakhs Only)	

Certificate

1. The workspot was inspected and works is found to be necessary.
2. The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3. The rates adopted based on the PWD SR,Bangalore circle for year 2018-2019, Pred , Electrical Sr 2014-15 Issue rates and Data

Rates

Assistant Engineer
Yelahanka Project division
BBMP Bangalore

22/10/19
Asst. Executive Engineer
Yelahanka Project division
BBMP Bangalore

22/X/19
Executive Engineer
Yelahanka Project division
BBMP Bangalore

Administrative Approval

Accorded For RS.120.00 Lakhs only
Head of A/C..P-3727
CER NO :....27..... Dt:04/11/19

E.E. (Project) 4/11

Technical Sanction

Accorded For RS120.00lakhsonly
Head of A/C..P3727
CER NO :....160..... Dt:06.11.2019

TA to CE (YNK)

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